



2017-11-10

## The security of SAP® systems

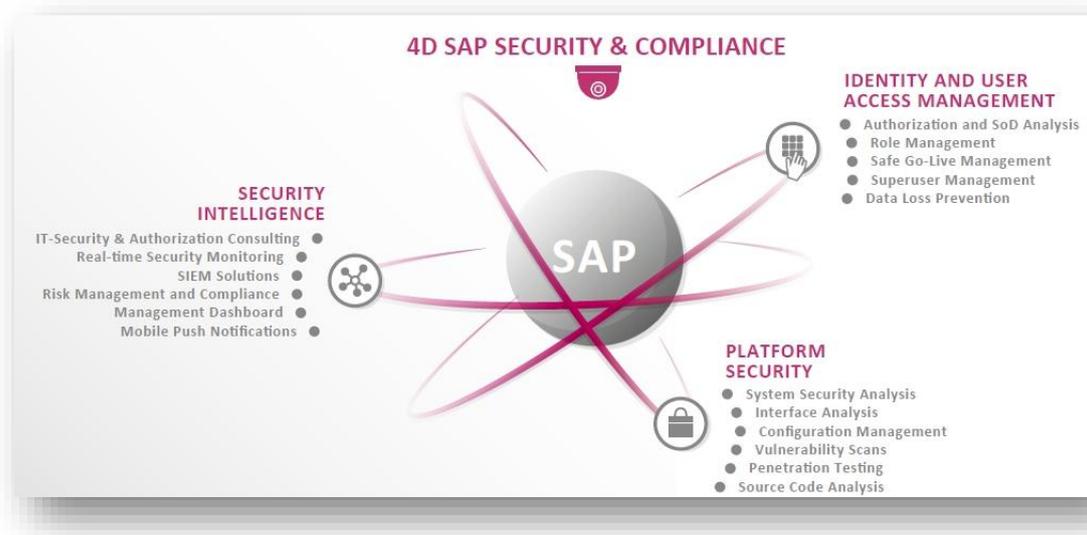
Today's ERP System is another server in the data center, accessible internally and externally like every Windows, Unix, Linux or other server. Not only is the ERP environment vulnerable to internal malicious users, but also to external hacktivists, criminals and competitors.

The most effective way for organizations to reduce the costs of SAP security while strengthening security defenses is to automate and optimize security implementations. Adstech provides with the Akquinet GRC suite and additional modules perhaps the most comprehensive tools on top of SAP security functions to strengthen the SAP security and to comply with industry and EU regulations.

### Akquinet 4D SAP Security and Compliance

The Akquinet SAP GRC Solution Suite comprises of:

- SAP Platform Security tools
- SAP Security Intelligence tools
- SAP Identity and User Access Management tools

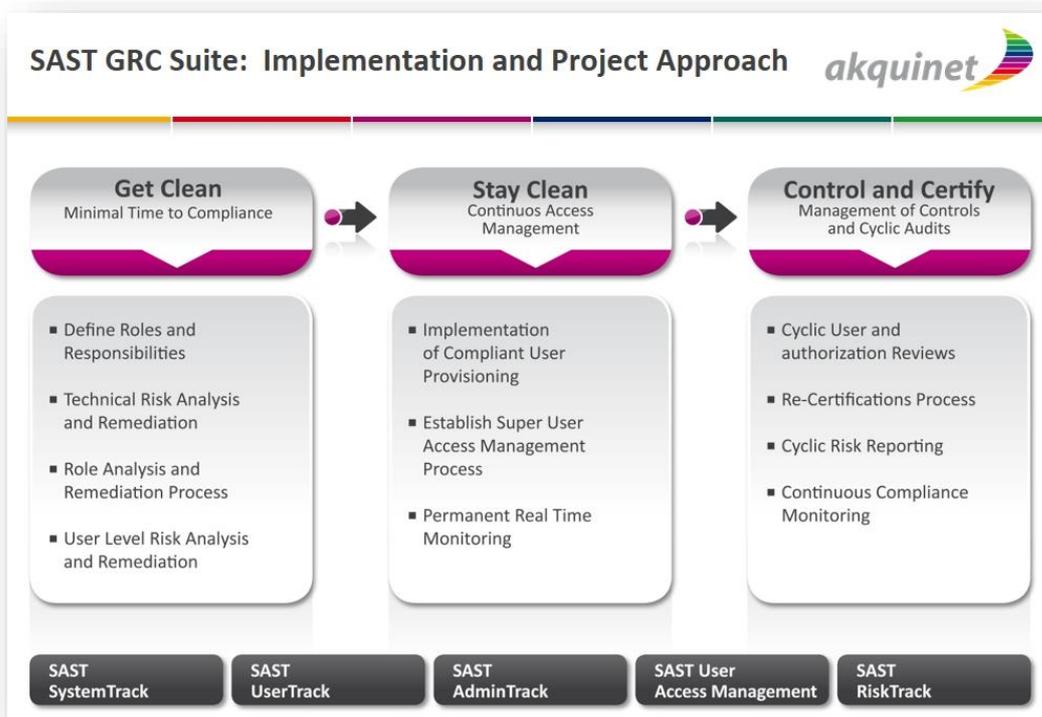


The 3 different product groups contain individual and integrated products that can be acquired as a suite or individually.

The **SAP Platform Security** tools focus mainly on technical aspects of SAP Security whereas **preventing** unauthorized access the **SAP Security Intelligence** tools help you to analyze how different users interact with SAP and what kind of risks are involved giving you an opportunity to **react** on security issues and collect logs on usage of data. The 3rd product group **SAP Identity and User Access Management** tools help you to provide correct authorizations to the SAP users, in order **limit** access to data inside your organization to minimize potential internal misuse of SAP.

Looking at the situation from another perspective the tools help you to **Get Clean** from a situation where there are many security vulnerabilities and thereafter they help you to **Stay Clean**. In addition

they provide on-going possibilities to **Control and Certify** that you are compliant with all security requirements and standards.



Following is a view of the solutions from the 4D perspective and short descriptions of the specific products:

PLATFORM SECURITY	IDENTITY AND USER ACCESS MANAGEMENT		SECURITY INTELLIGENCE
System Security Validation	Authorization Management	Superuser Management	Risk and Compliance Management
Interface Management	Role Management	HCM Read Access Monitoring	Security Radar
Download Management	Safe Go-Live Management	Password Selfservice	Management Dashboard
	User Access Management		

● Basic-Modul    ● Special-Modul

Following are the specific products **Akquinet** products. A short description of each product will follow thereafter. From a product delivery perspective, there is a basic license which is priced based on number of SAP systems to be managed by the products.

The products can be acquired individually based on customer needs.

All products are fully integrated in SAP as Add-on products and installed via SAP transports.

## Platform Security

**SAST SystemTrack** - Completely protected SAP® systems

**SAST Interface Analyzer** - Analysis and safeguarding of SAP® system interfaces

**SAST Download Observer** - Protection against theft of data from SAP® systems

## Identity and User Access Management

### Authorization Management

**SAST UserTrack** - Authorization analysis in real time

**SAST Role Optimizer** - Automatic generation of SAP® roles

**SAST User Access Management** - Audit-proof management of users, roles and rights

### Superuser Management

**SAST AdminTrack** - Secure emergency user procedure

**SAST AT HCM DisplayTrack** - The logging of read access to SAP® HCM data

**Intranet Password Reset** - Self-service for simple password reset

## Security Intelligence

**SAST RiskTrack** - Monitoring of risks and mitigating controls

**SAST Security Radar** - 360° real-time monitoring of your SAP® systems (SIEM)

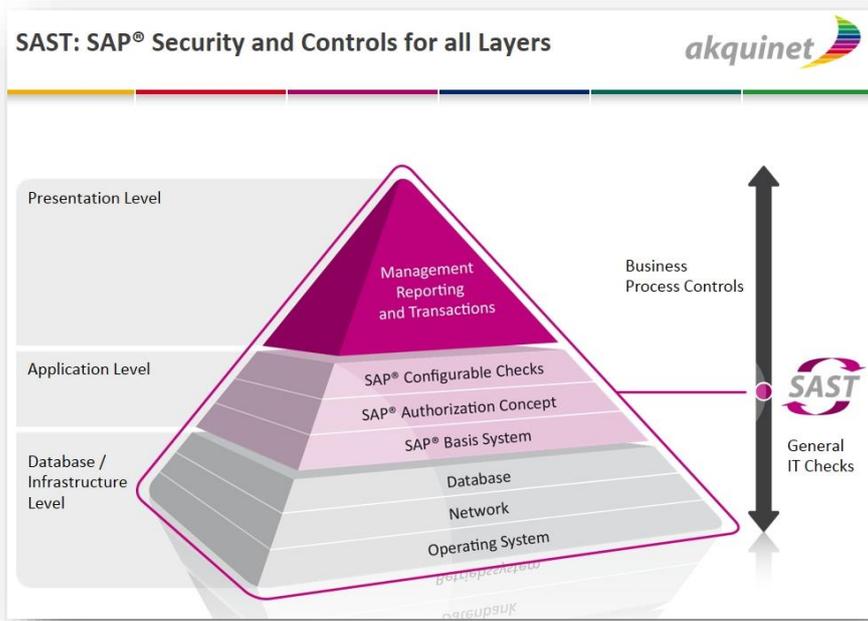
**SAST Mobile Protect** - 360° mobile real-time monitoring of your SAP® systems (SIEM)

**SAST Management Cockpit** - The integrated solution for risk analysis and control

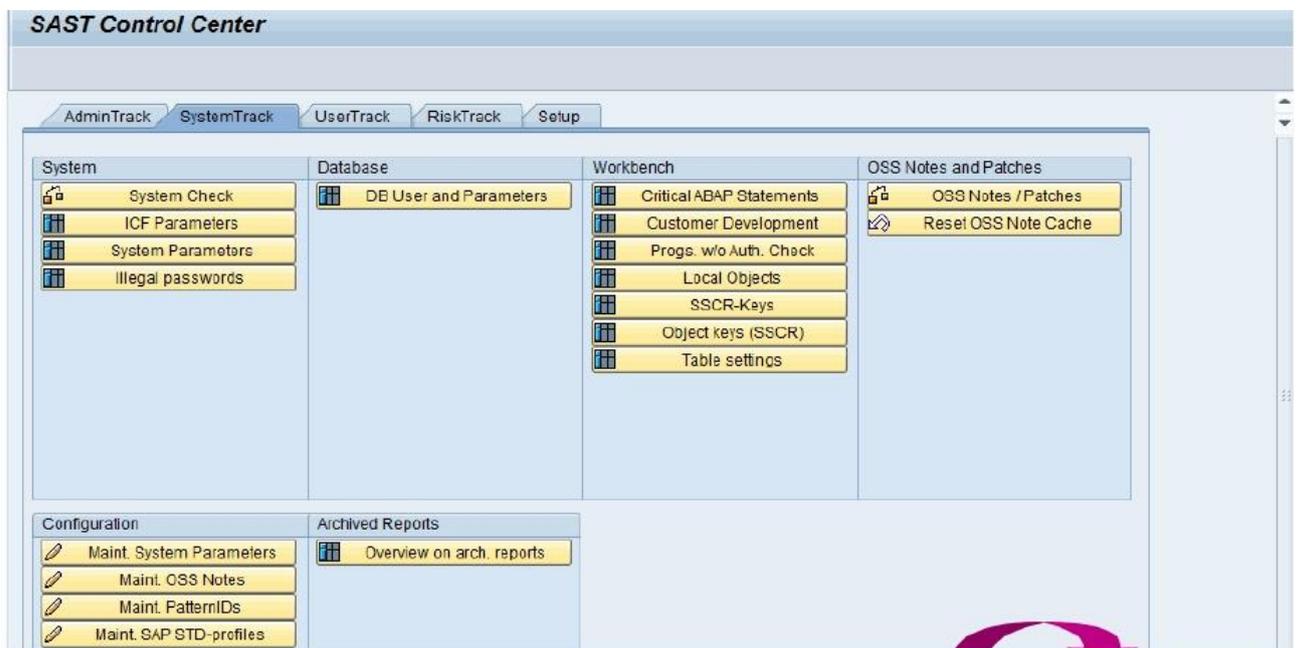
## Platform Security

**SAST SystemTrack** - Completely protected SAP® systems against attacks

If the SAP® system is not protected on all levels it poses a risk and is open for attacks. Data theft or data loss through sabotage can have serious consequences for companies. Irreparable damage to the corporate image, compensation payments, or the disruption of regular business are just three examples. It is even conceivable that entire SAP® systems could be lost.



Our SAP security monitoring tool also monitors the relevant security levels, including the operating system and database parameters, as well as critical SAP notes. SAST SystemTrack even analyzes the code of custom-developed ABAP programs to pinpoint any weaknesses in the source code.



**SAST Interface Analyzer** - Analysis and safeguarding of SAP® system interfaces

SAP® interfaces are often not considered when SAP® systems are protected. Therefore, they are unprotected and attractive targets for hackers.

Experience from numerous SAP® security audits and penetration tests performed by Akquinet for SAP® systems show repeatedly that, in almost every SAP® system checked, unprotected interfaces exist that could allow attackers direct access to your SAP® systems.

Using the SAST Interface Analyzer, you can find out exactly what these weak points of your SAP® interfaces are and address them.

### **SAST Download Observer** - Protection against theft of data from SAP® systems

SAP® users not only have access to sensitive data in the company's SAP® system, they also often can easily download the entire content of tables or send them to external recipients by mail. This situation is problematic from a data protection point of view, because the extracted data is no longer protected by the **SAP® authorization concept**.

Companies are at the risk of breaches of security or even industrial espionage, because the data can be forwarded to third parties unnoticed.

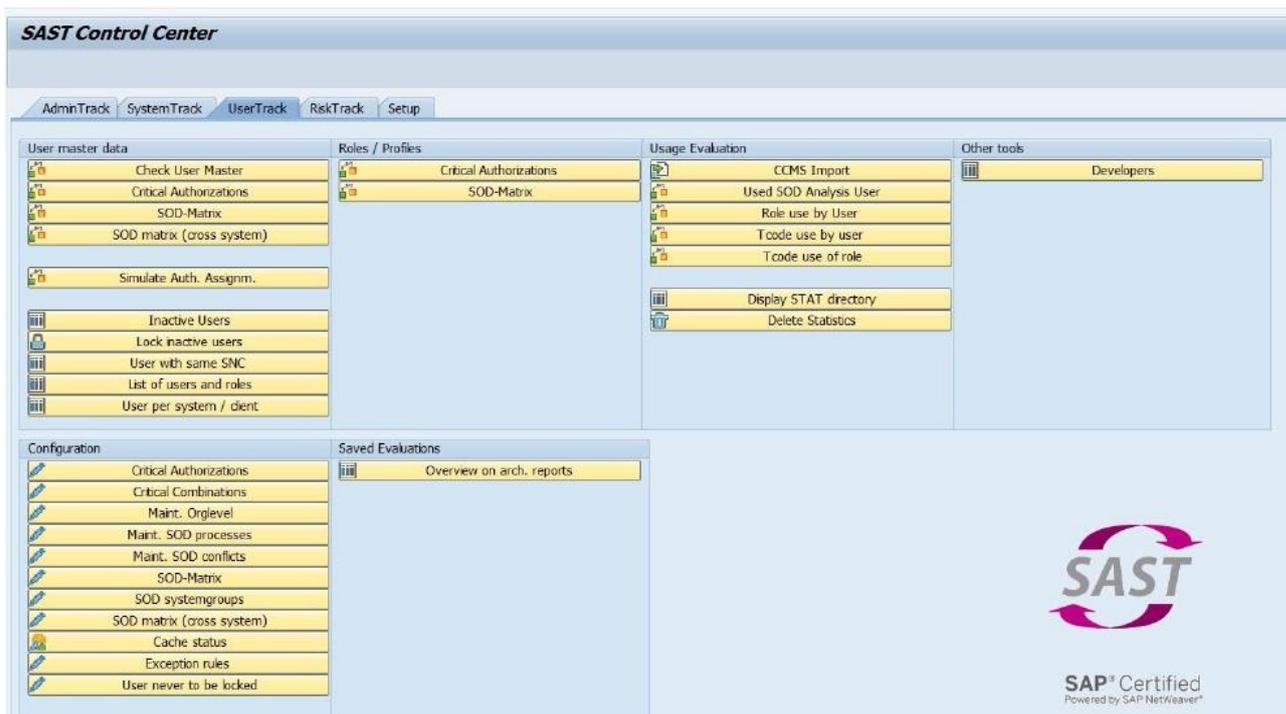
With our download monitoring tool, we offer a solution that automatically monitors and logs the download of sensitive data from the SAP® system. This gives you an effective tool for protecting your company against industrial espionage and the infringement of data protection regulations.

## **Identity and User Access Management**

### **SAST UserTrack** - Authorization analysis in real time

SAST UserTrack focuses on SAP® authorizations. This allows you to recognize problems with authorizations as well as potential function-based separation of duty conflicts in real time, before the live system is affected for a best possible authorization security.

Checkers will receive qualified assessments from 'one' workplace, and can monitor and evaluate critical SAP® authorizations, combinations, processes, and separation of duty matrices (SoD regulations) based on pre-configured as well as freely configurable SoD matrices.



### SAST Role Optimizer - Automatic generation of SAP® roles

Create and manage users and roles easily, efficiently and securely! Our solution assists you in working out the required **user rights**, creating **SAP® roles** and continuous management of your user rights concept.

New SAP® roles can be created based on the tried and tested **Akquinet** template or by evaluation of the user activity. All forms of role creation are supported (manual, transaction-related or from trace data).

Mass modifications or **roll outs** are thus possible without any problem in next to no time. SAST Role Optimizer supports mass derivatives based on centrally defined organization values, as well as mass modifications at object and field level.

The provision of sophisticated analyses enables SAP® processes to be analyzed by automated means. Existing roles can be analyzed in respect of transaction use and by using SAST Role Optimizer tailored precisely to the customer's requirements. Using **SAST Role Optimizer**, you are able to set up your user rights concept quickly and easily.

### SAST User Access Management - Audit-proof management of users, roles and rights

The management of user accounts in companies with many SAP® users represents a major challenge. This is particularly difficult when the user identities have to be managed in several systems, directory services or databases. The standard tools available for this purpose are usually not intuitive, with the possibility for cross-system, transparent management of user identities and authorizations frequently missing. This causes complexity, conflicts in function separations and high costs.

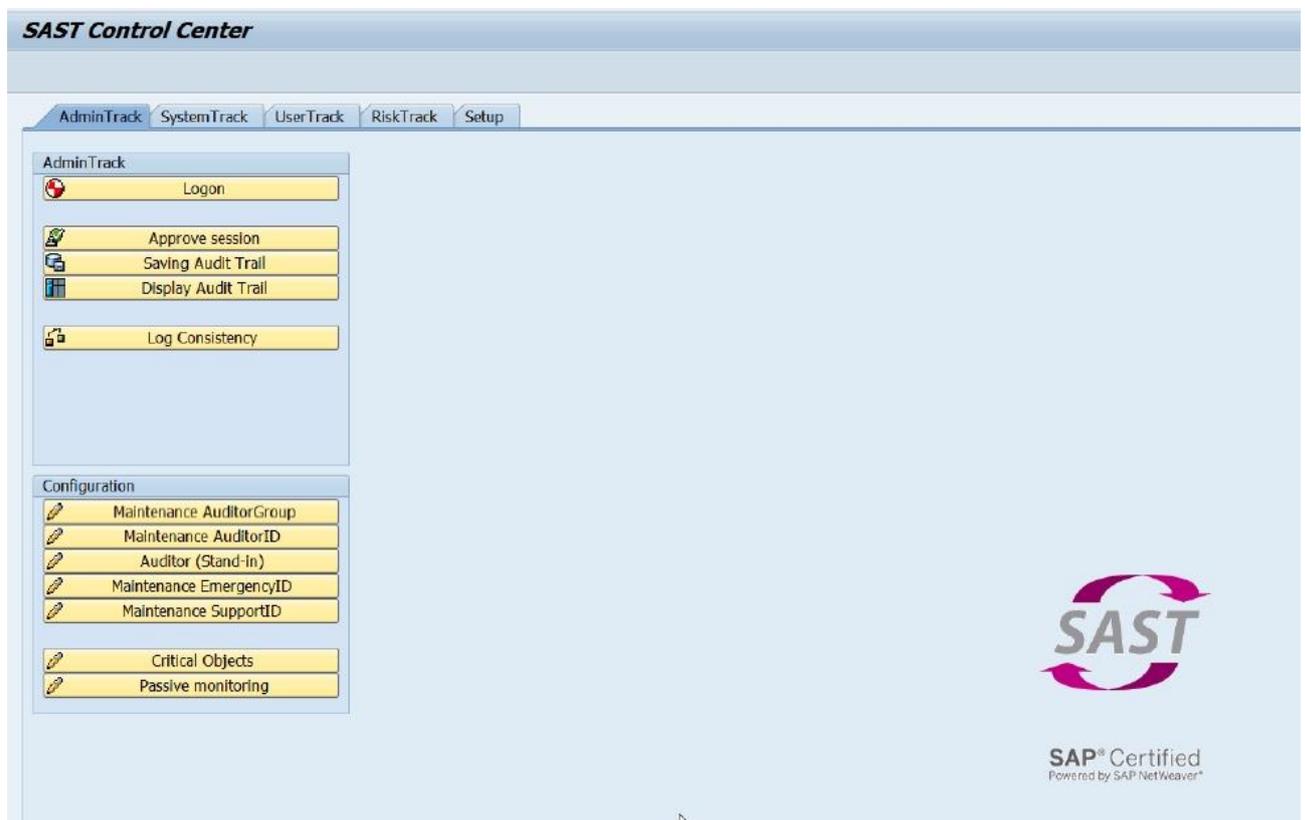
For the authorization management of your SAP® systems, we are offering you our SAST User Access Management tool. This enables identities, roles and authorizations for SAP® users to be managed, protected and controlled both securely and efficiently.

## Superuser Management

Do you need to enable your administrators and users to work without extended authorization or SAP\_ALL for normal operations? Use the functions of SAST AdminTrack to fully monitor privileged users - such as emergency users - and their access to your **SAP® system**.

This way, when administrators and users are in a support situation they only have to click to activate an emergency ID, which they can use after describing their planned course of action.

During the support session, all activity of the emergency user is gathered in a detailed, revision-proof report and placed at the disposal of an auditor, who will be informed online or by mail.



## SAST HCM Display Track

SAP® systems are not only the target of external attacks, they are also "attractive" for unauthorized access by internal people. Even if SAP® users protect their valuable HCM data through a sophisticated SAP® role and authorization concept, there are still gaps that internal people can use to gain access.

With logging of all read access to HCM data you can monitor audit all access to HCM data. This situation is very problematic from a data protection and personnel legislation point of view, because read access to sensitive HR-data cannot be recognized or documented by the SAP®-system.

From the point of view of the HR department, the data protection officer and audit department, a remedy for this must be found. What helps at this point is reliable technical support and supplement to the „SAP® standard system“ that monitors and fully logs the „reading“ of sensitive data.

### **Intranet Password Reset** - Self-service for simple password resets

As a result of constantly **rising security standards** within companies, users are having to remember longer and more complex passwords. There is a danger that they will forget these passwords and have to avail themselves of the help desk to have passwords in multiple environments reset. The process for resetting passwords creates additional complexity and leads to higher costs and an increased workload.

The SAP® password self-service tool simplifies the implementation of stricter password guidelines and eliminates the costs for help desk calls.

The intranet-based self-service system passes the **solution** for resetting the password straight to the **user** and thus eliminates long, time-consuming request processes involving the help desk. Employees are able to reset their passwords immediately and from any location via a simple and secure process.

## **Security Intelligence**

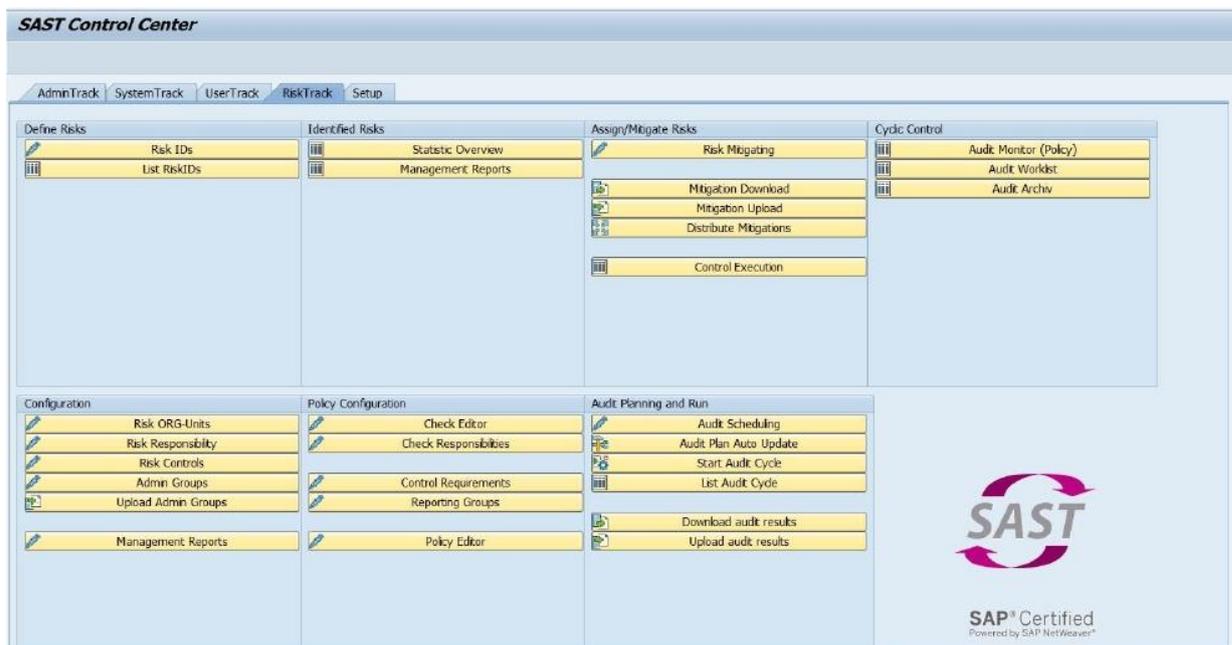
### **SAST RiskTrack** - Monitoring of risks and mitigating controls

An all-embracing, effective **SAP® risk management** system helps in the decision-making process and has enormous potential to create added value for the entire business.

In practice, however, risk management is frequently just a reactive process, which is carried out in an uncoordinated way or related to individual departments only. The means of identifying **risks** of your SAP®-system at an early stage are thus often missing.

The **SAST RiskTrack module** provides extensive functions for managing identified risks, for defining compensating controls and for assisting in performing regular checks to safe your SAP®-systems.

Any risks identified from user rights evaluation, **SoD evaluation** or technical systems checks can be transferred with a click of the mouse straight from the analyses into the risk storage area for further processing.



## SAST Security Radar - 360° real-time monitoring of your SAP® systems (SIEM)

For permanent monitoring of your systems' security it's necessary that:

- the system configuration
- user rights and
- security and change logs

are monitored in a timely and comprehensive manner for any security loopholes or attempted attacks. Security Radar performs this task by cyclically monitoring and analyzing security relevant log files and the use of reports, transactions and web services.

SAST Mobile Protect is an app within the SAST Security Radar that alerts you immediately on your smartphone and informs you about critical incidents.

As soon as a security-relevant event occurs (e.g.: assignment of the SAP\_ALL profile to a user), the information is immediately forwarded to SAST Mobile Protect. You can view the most important details of the event and immediately initiate and execute suitable measures (e.g.: lock the SAP® user responsible).

## SAST Management Cockpit - The integrated solution for risk analysis and control

Using SAST Management Cockpit as a supplement to the SAST GRC suite for SAP® you are able to visualize on a QlikView basis all audit results and to illustrate complex data for colleagues and superiors in an easily understandable way.

You are thus able to analyze the cause-and-effect relationships from the results of our SAP® security tool SAST and, even without any special IT skills, to quickly determine the causes for any security loopholes. Risk analysis using the SAST Management Cockpit based on QlikView is quick to deploy, flexible and impressively quick in terms of response times.

## Pricing

The products are priced based on number of SAP systems to be monitored and managed by the products and the number of SAP Professional users defined in the systems.

The annual maintenance fee is 21 % of the license fee.

## More information

Contact [sales@adsotech.com](mailto:sales@adsotech.com) for additional information about Akquinet solutions. Visit our website at [www.adsotech.com](http://www.adsotech.com)